Pre-Qualification Application (Amended)

of

GRID GROWTH VENTURES, LLC and its subsidiaries and

Certain Electric Affiliates

for

Designated Transmission Entity Status

Submitted to PJM Interconnection, L.L.C. (PJM) on September 30, 2025

Pursuant to Amended and Restated Operating Agreement of PJM Interconnection, L.L.C., Schedule 6, section 1.5.8(a).

Table of Contents

Section 1: Name and address of the entity.

Designated Transmission Entity Applicants:

Grid Growth Ventures, LLC ("Grid Growth Ventures")
1 Riverside Plaza
Columbus, OH 43215

Designated Transmission Entity Contacts:

Evan K. Dean
8500 Smiths Mill Road
New Albany, OH 43054
M: (330) 942-2519
edean@aep.com

Dawn M. Del Bianco
8500 Smiths Mill Road
New Albany, OH 43054
M: (614) 933-2225
dmdelbianco@aep.com

JV Applicants:

Transource Energy, LLC (Transource)
1 Riverside Plaza
Columbus, OH 43215

FirstEnergy Transmission, LLC (FET)
5001 NASA Boulevard
Fairmont, WV 26554

Ultimate Parent Companies of Joint Venture Applicants (JV Applicants):

American Electric Power Company, Inc. (AEP) and Evergy, Inc. [via Transource Energy LLC]
1 Riverside Plaza
Columbus, OH 43215

FirstEnergy Corp. (FirstEnergy) [via FirstEnergy Transmission, LLC]
341 White Pond Drive
Akron, OH 44320

Overview of Grid Growth Ventures Joint Venture:

Two leaders in electric transmission development in the PJM Region, AEP (through Transource) and FirstEnergy (through FET) (collectively, the JV Applicants), are pleased to form this collaboration. Working together, this collaboration successfully developed robust multi-zonal, and extra high voltage (EHV) solutions that effectively resolve reliability issues identified in PJM's models in the 2025 RTEP Open Window #1.

Collaboration by some of the most experienced PJM Qualified Developers is a concept initially contemplated by FERC Order 1000, where the Federal Energy Regulatory Commission (FERC) noted that collaboration was ideally suited particularly in the case of large backbone facilities, and recently endorsed by FERC in its most recent Transmission NOPR (RM21-17-000) and resulting Order No. 1920. The joint venture brings this innovative collaboration to large-scale infrastructure planning within PJM at a time when it is essential to efficient and cost-effective regional transmission development. It is increasingly important to facilitate greater transfer capability between PJM zones. Intra-regional planning through this collaboration represents a much-needed shift in transmission planning and development. It brings together the collective resources and experience of two corporate entities having utilities whose boundaries meet and whose generation and load development require well-coordinated solutions to resolve the increasing growth and generation pattern shifts within PJM.

This collaboration enables the JV Applicants to offer PJM more efficient and more comprehensive solutions to the complex reliability problems that need to be addressed in the PJM Region. Joint solutions offer advantages for, among other things, siting approvals, engineering and other resources, existing corridors, and specific expertise such as for 765 kilovolts (kV) transmission lines.

Specifically, the collaboration allows for many benefits in service to PJM's mission including:

- Sharing the local knowledge of each respective transmission system to jointly develop solutions and execute the work – a process envisioned through FERC Order Nos. 1000 and 1920;
- Utilizing existing transmission corridors which allows for confident constructability plans;
- Leveraging well-established community and state relationships to facilitate an efficient permitting timeline and knowledge of the political and on-the-ground sensitivities to mitigate potential risks;
- Offering the ability to propose aggressive construction timelines that provide the best opportunity to meet PJM's In Service Date requirements;
- A heightened sensitivity and focus on system reliability and resilience;
- Industry leading expertise in the 765 kV level;

- A strong consideration of innovative technology advances in transmission, including use of ACSS conductor, STATCOMs, and other innovative technologies;
- Allowing for realistic and informed (market based) project cost & schedule estimates; and
- Spreading the execution risk of these sizeable infrastructure investments among two experienced industry leaders.

Each JV Applicant and its affiliates provide unique value and benefits to this collaboration. At the same time, the expertise of each JV Applicant and its affiliates help identify and mitigate risks associated with the proposed projects, to the benefit of customers. A few examples of how this collaboration yielded results that could not have been experienced if pursued individually include:

- **Schedule and Cost Savings:** With collaborative access to a full suite of EHV engineering standards, our collaboration was able to confidently plan the system with a suite of 345 kV, 500 kV, and 765 kV standards available. The designs are complete, field tested, and ready for continued deployment, saving both time and money.

- **Local System Knowledge in Station Design:** Both members of this collaboration bring local, on-the-ground knowledge in addressing the needs of the Open Window with an eye toward the future. This represents not only expertise in mitigation of on-the-ground risk, but inherent planning and additional cost savings in designing solutions considering future system needs.

- **Utilization of Existing Rights of Way (ROW):** This collaboration optimizes solution design and utilizes existing ROW as much as possible to minimize risk and increase constructability.

Overview of Grid Growth Ventures Joint Venture Corporate Structure:

As depicted in the diagram below, the members of Grid Growth Ventures are:

- Transource Energy, LLC, which is a joint venture between AEP Transmission Holding Company, LLC (holding 86.5% interest) and Evergy Transmission Company, LLC (holding 13.5% interest). Each of these entities are wholly owned by American Electric Power Company, Inc. and Evergy, Inc. respectively as the ultimate parents.

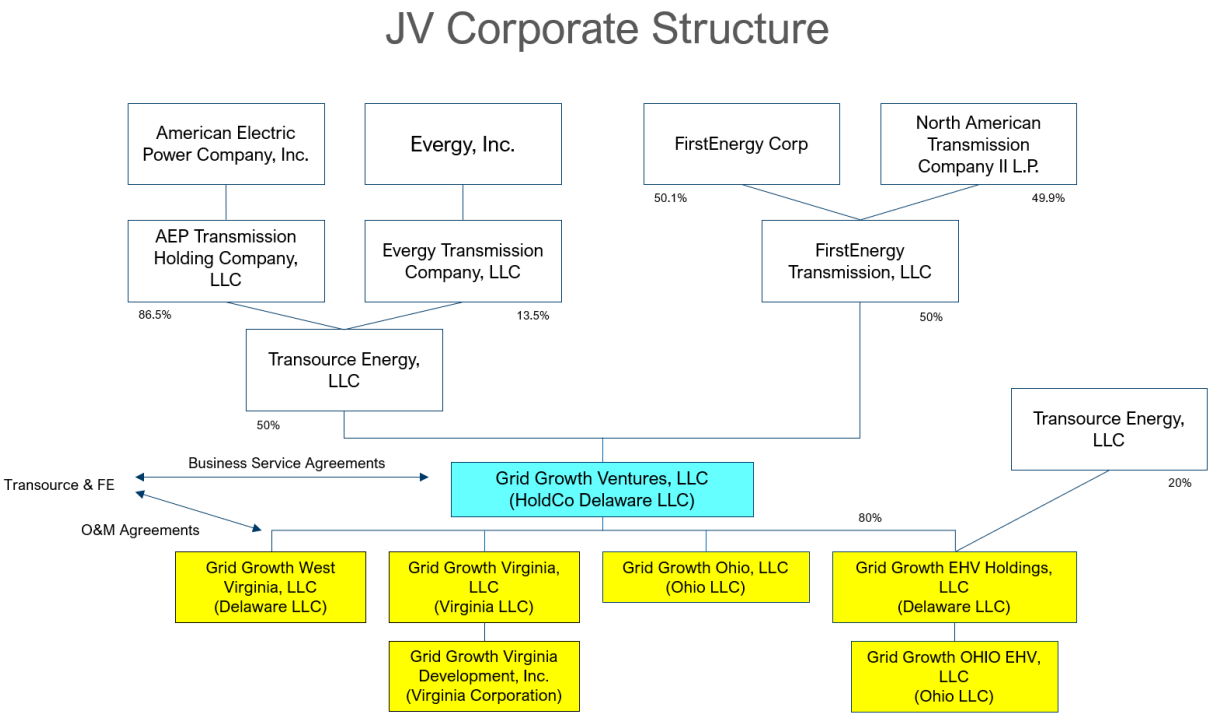
- FirstEnergy Transmission, LLC is a transmission holding company owned by FirstEnergy (holding a 50.1% interest) and North American Transmission Company II L.P., a controlled investment vehicle entity of Brookfield Infrastructure Partners (Brookfield) (holding a 49.9% interest).

Grid Growth Ventures owns the following subsidiaries (the “Project Companies”):

- Grid Growth EHV Holdings, LLC
- Grid Growth Ohio EHV, LLC
- Grid Growth Ohio, LLC
- Grid Growth West Virginia, LLC
- Grid Growth Virginia, LLC
- Grid Growth Virginia Development, Inc.

The JV Applicants or their affiliates will provide various business support services to Grid Growth Ventures through affiliate agreements, and Grid Growth Ventures will in turn provide

services to the Project Companies. The JV Applicants or their affiliates will also provide operations and maintenance services to the Project Companies through affiliate agreements.



Overview of Ultimate Parent Companies:

American Electric Power Company, Inc.:
AEP is one of the largest electric utilities in the United States, delivering electricity to approximately 5.4 million customers across 11 states. AEP owns the nation's largest electricity transmission system, a network of more than 40,000-miles or transmission lines that includes more 765 kV extra-high voltage transmission lines than all other U.S. transmission systems combined. AEP operates in 11 states and actively develops transmission assets in four RTOs, including Midcontinent Independent System Operator, Electric Reliability Council of Texas, PJM, and Southwest Power Pool, Inc. Transource is a joint venture between AEP and Evergy, Inc. focused on the development and investment in competitive electric transmission projects across the United States. AEP owns 86.5% of Transource.

FirstEnergy Corp.:
FirstEnergy's electric distribution companies form one of the nation's largest investor-owned electric systems serving 6 million customers in 5 states. Its more than 24,000 miles of transmission lines throughout the Midwest and Mid-Atlantic regions are owned and operated by American Transmission Systems, Incorporated (ATSI), Mid-Atlantic Interstate Transmission, LLC (MAIT), Jersey Central Power & Light Company, Keystone Appalachian Transmission Company, Monongahela Power Company, The Potomac Edison Company, and Trans-Allegheny Interstate Line Company (TrAILCo). FET, the parent of ATSI, MAIT, and TrAILCo, is a subsidiary of FirstEnergy, which holds 50.1% of its issued and outstanding membership interests. North American Transmission Company II L.P., a controlled investment vehicle entity of Brookfield, owns the remaining 49.9% of the issued and outstanding membership interests of FET.

Section 2: Technical and engineering qualifications of the entity or its affiliate, partner, or parent company

American Electric Power:
AEP is the largest transmission owner and operator in the country, with a network of more than 40,000-miles that includes more 765 kV extra-high voltage transmission lines than all other U.S. transmission systems combined. AEP also operates more than 223,000 miles of distribution lines.

AEP has a large internal planning organization which allows the AEP transmission system to be planned and operated on an integrated basis. AEP Transmission works closely with neighboring utilities, other interconnected entities, and the RTOs to plan and operate the transmission grid in alignment with RTO protocols and the North American Electric Reliability Corporation (NERC) requirements and Reliability Standards. AEP's station and line project managers can execute projects varying in complexity from small projects such as circuit breakers, to large projects such as the construction of over 280 miles of 765 kV line in mountainous terrain. AEP's purchasing power gives it the unique ability to reserve shop space in advance of actual purchase to meet project needs, and the company have relationships and contracts with most major vendors that meet its exacting engineering and manufacturing standards.

AEP employs thousands of employees who have extensive knowledge, experience, and expertise in all aspects of transmission planning, construction, and operation. Many of AEP's personnel are trained to work on specialized equipment involved in the large EHV systems AEP operates. Constructing, operating, and maintaining the nation's largest 765 kV system of over 2,000 miles requires uniquely specific training. In addition to those specialized fields these personnel also have extensive knowledge and training in 115 kV and 345 kV systems as well. Listed below are some of AEP's general areas of expertise:

- Transmission Planning
- Project Management
- Project Estimation
- Transmission Asset Management
- Transmission Health Engineering & Monitoring
- Transmission Line Engineering
- Transmission Station Engineering
- Transmission Protection & Control Engineering
- Transmission Line Engineering Standards
- Transmission Station Engineering Standards
- Transmission Protection & Control Engineering Standards
- Transmission Procurement
- Transmission Construction
- Procurement Third Party Risk Analysis
- Routing and Siting
- Right-of-Way
- Customer Outreach

- Vegetation Management
- Environmental Stewardship
- System Maintenance
- Inspection
- Training
- Operations and Compliance
- Health and Safety
- Contractor Oversight Program
- Regulatory
- Interconnection Management

FirstEnergy:
FirstEnergy's transmission system spans six states and five PJM Transmission Zones and consists of more than 24,000 miles of transmission lines. To assure that the system is operated reliably, assessments of the system are conducted annually by FirstEnergy's transmission owning affiliates and PJM. This is accomplished by evaluating system reliability against federally mandated Reliability Standards established by NERC and approved by FERC, the PJM reliability criteria, and FirstEnergy's Transmission Planning Criteria.

FirstEnergy's affiliates have extensive experience as Transmission Owners in responding to PJM's directives to build RTEP projects and have never failed to build projects that PJM has determined are needed for reliability or market efficiency of the PJM transmission system. The FirstEnergy companies build, operate, and maintain their transmission facilities reliably and safely and in accordance with all governmental regulations as well as applicable industry requirements. Overall, FirstEnergy's personnel have extensive direct, hands-on experience with all phases of design, build, maintenance, and operation of the transmission system.

FirstEnergy has robust Power Delivery and Construction & Design Services organizations. FirstEnergy's personnel have extensive and direct hands-on experience with all phases of design, build, maintenance, and operation of the transmission system. FirstEnergy also has engineers, drafters, designers, project managers, transmission specialist, data analysts, and numerous other construction, operations, and support personnel that engineer, construct, maintain, and operate transmission facilities, including but not limited to the following:

- transmission line and substation engineering
- transmission siting
- external engineering (transmission line and substation)
- geotechnical/Site/Civil engineering
- scoping & estimating and standards
- transmission & substation maintenance
- transmission planning and protection
- transmission operations
- asset management and records control
- project and construction management
- major equipment
- portfolio management

Section 3: Demonstrated experience of the entity or its affiliate, partner, or parent company to develop, construct, maintain, and operate transmission facilities, including a list or other evidence of transmission facilities the entity, its affiliate, partner, or parent company previously developed, constructed, maintained, or operated.

The JV Applicants will oversee the operations of Grid Growth Ventures through its Board of Managers, which will be composed of an equal number of qualified designated employees from each of the JV Applicants. The Board of Managers will appoint officers and will form committees to carry out the day-to-day operations of Grid Growth Ventures and the Project Companies.

The implementation, development, construction, and operation of any awarded projects will require Grid Growth Ventures and the Project Companies to comply with certain legal and regulatory requirements, including regulatory accounting and the appropriate rate and other filings with FERC.

Grid Growth Ventures and the Project Companies will utilize both third party contractors and affiliate agreements with one or more JV Applicants (or their affiliates) for the development, construction, operation, and maintenance of any awarded projects. The determination of which JV Applicant will provide services for a particular project will take into account each JV Applicant's expertise, experience, ability, and availability, as well as other relevant considerations, such as the location of the corresponding awarded project, to ensure that the JV Applicant best suited to perform such services on a cost-effective basis is selected to lead each component of a project. Services provided by a JV Applicant under such an agreement will be subject to applicable regulatory requirements and will be priced at the service provider's cost.

JV Applicants and their affiliates collectively have hundreds of years of experience in developing, constructing, maintaining, and operating transmission facilities, both within and outside of the PJM Region.

The JV Applicants' and their affiliates' engineering and construction standards for transmission facilities are currently posted on the PJM website at the following link: https://www.pjm.com/planning/design-engineering/to-tech-standards.

The JV Applicants and their affiliates have completed billions of dollars in transmission construction projects, including the following examples:

- Jackson's Ferry - Wyoming 765 kV Transmission line: This 90-mile 765 kV transmission line crosses two states. This project required AEP to overcome numerous cultural, legal, environmental, and technological barriers.
- Maliszewski 765 kV/138 kV Substation: This AEP station includes notable industry firsts, including the first 800,000-volt SF6 dead-tank circuit breaker, and it is the first 765 kV station to employ HMI (Human Machine Interface) technology, which allows equipment operation via a touch screen console.

- Roberts - OSU 138 kV Underground Line: AEP designed and constructed 5.55 miles of 138 kV underground transmission line using a 2,500 KCM Prysmian XLPE© cable design in a heavily residential area.
- FirstEnergy's "Energizing the Future" program: FirstEnergy has achieved a 47 percent reduction in the number of customers interrupted by transmission-related outages, an 81% reduction in mis-operations, and a 40% reduction in transmission line outages serving ATSI. For MAIT, FET achieved a 30% reduction in the number of customers interrupted by transmission-related outages, a 62% reduction in mis-operations, and a 19% reduction in transmission line outages.
- FirstEnergy Transmission Projects: FirstEnergy has completed 600 to 700 new transmission projects per year focused on four areas of investment: regulatory required projects, upgrading or replacing aging equipment to strengthen facilities against severe weather; enhancing system performance through technology upgrades; and adding operational flexibility.
- FirstEnergy Transmission Lines: FirstEnergy has replaced or rebuilt more than 900 miles of transmission lines across its service area. FirstEnergy has also installed approximately 1,250 miles of new fiber optic-cable across its system to improve network communications and enable grid operators to react immediately to disturbances on the system by quickly isolating damage and rerouting power from other sources.

Additional projects undertaken by the JV Applicants and their affiliates can be found on PJM's Project Status & Cost Allocation database at https://www.pjm.com/planning/m/project-construction.

Section 4: Previous record of the entity or its affiliate, partner, or parent company regarding construction, maintenance, or operation of transmission facilities both inside and outside of the PJM Region.

As evidenced in sections 3 and 5, the JV Applicants and their affiliates have established a long record of constructing, owning and operating transmission assets. The JV Applicants and their affiliates participate in many PJM stakeholder committees and industry forums to maintain best practices in transmission operations and maintenance practices. The JV Applicants and/or their affiliates also operate multiple 24-hour system operations centers (SOC) staffed with NERC and PJM certified operators. The JV Applicants and their affiliates have a proven track record of compliance with all state, federal and industry practices, and requirements and, in addition, adherence to good utility practice.

Section 5: Capability of the entity or its affiliate, partner, or parent company to adhere to standardized construction, maintenance, and operating practices.

The JV Applicants and their affiliates have a long history of proven adherence to all state, federal and industry practices, and requirements and, in addition, adherence to good utility practice. Each JV Applicant and/or their affiliates have well-established design standards for implementation of new and retrofit projects. These standards are based on industry, local, state, and federal requirements in addition to good utility practice. These standards are reviewed and revised on a regular basis. Additionally, each JV Applicant and/or their affiliates have documented standards, and materials for timely emergency restoration following failures of both substation and transmission line equipment. All identified project design solution alternatives are thoroughly reviewed during the conceptual design layout period and include constructability review.

Transmission Construction

The transmission construction personnel of each of the JV Applicants are responsible for supporting the construction of transmission assets and the vegetation management of transmission rights of ways. This includes responsibility for (i) electric transmission and substation construction, (ii) construction of electric transmission lines, and (iii) electric transmission forestry.

Field Operations

Transmission field operations personnel are committed to safely and efficiently maintaining the electric transmission system for each of the JV Applicants and their affiliates, and insuring asset compliance, reliability, and optimal performance. This includes personnel responsible for (i) electrical equipment, (ii) system protection, (iii) transmission and substation operations, including vegetation management (iv) nuclear operations, and (v) operational engineering support.

Planning & Communications

The JV Applicants and/or their affiliates have transmission planning personnel who oversee the development of their long-range transmission expansion plan through the PJM Planning process to assure compliance with NERC Reliability Standards. They also perform stability studies of generation and participate in various regional and inter- regional planning study groups and committees. They also have communications personnel who help communicate the technical content as project plans are shared with internal and external stakeholders.

Transmission Projects

The JV Applicants and/or their affiliates have personnel responsible for implementing projects to build or improve new substations and transmission lines. They support personnel from the transmission and distribution planning, transmission and distribution reliability, generation, and cooperatives groups. These personnel are responsible for leading a multi- disciplined team representing all groups involved to develop and then implement the appropriate solution. These personnel are also directly responsible for acquiring all ROWs, securing necessary permits, engineering and overall project management with supply chain and construction support provided within the project teams.

Substations

The JV Applicants and/or their affiliates also have personnel who are responsible for the operation, maintenance, and installation of all substation electrical equipment. These personnel provide investigative and diagnostic tests to establish health assessment and operational integrity of the substation equipment, administer strategic modernization plans which focus on the replacement of aging infrastructure to improve operational reliability, and provide technical support to their environmental regulatory review process and support compliance with environmental programs. These personnel also develop work methods and procedures for the operation and maintenance of substations with an emphasis on improved safety, training, and productivity; and maintains adequate spare major transmission equipment and mobile units to limit extended outages due to equipment failure.

Transmission Reliability

The transmission reliability personnel of the JV Applicants and/or their affiliates perform highly technical functions in support of transmission and distribution operations and analysis and are responsible for circuit calculations and protective relay settings, as well as fault analysis, as well as reliability metrics and statistics, and recommendations to improve the reliability of the electric transmission and distribution systems. These personnel serve as the primary liaison to key transmission customers such as large industrials and government agencies.

System Operations

FirstEnergy and AEP also have SOCs responsible for the safe and reliable operation of the electric transmission system or "grid" in their respective transmission zones. The SOC staff monitors each transmission facility around the clock and continuously assesses the potential impacts on system reliability that could result from an unplanned loss of any single facility. The SOCs system operators also authorize and direct all transmission switching to support construction and maintenance needs, or to facilitate system restoration in the safest manner possible.

The SOC personnel work in close coordination with the system operators of PJM and perform a technical support role for the SOC as well as providing its back-office functions. This group is responsible for regulatory review and standards development, compliance monitoring and reporting, engineering support of the computer model of the transmission system, documentation of SOC procedures and references, training support, and miscellaneous projects. They also serve as the primary liaison to the operations support functions of PJM and other industry groups.

Section 6: Financial statements of the entity or its affiliate, partner, or parent company for the most recent fiscal quarter, as well as the most recent three fiscal years, or the period of existence of the entity, if shorter, or such other evidence demonstrating an entity's or its affiliates, partners, or parent company's current and expected financial capability acceptable to the Office of the Interconnection.

No update to financial statements since December 13, 2024 submission of Pre-Qualification Application (Amended) of Valley Link Transmission Company, LLC and its subsidiaries and Certain Electric Affiliates for Designated Transmission Entity Status.

Section 7: Commitment by the entity to execute the Consolidated Transmission Owners Agreement, if the entity becomes a Designated Entity.

As existing Transmission Owners in PJM, certain affiliates of the JV Applicants are already signatories to the Consolidated Transmission Owners Agreement. Grid Growth Ventures, for itself and its subsidiaries, commits to signing the Consolidated Transmission Owners Agreement upon becoming Designated Entities.

Section 8: Evidence demonstrating the ability of the entity or its affiliate, partner, or parent company to address and timely remedy failure of facilities.

The public utilities operated under the Ultimate Parent Companies' umbrellas have a strong record of responding quickly and safely to service interruptions.

FirstEnergy

Hurricane Sandy:

Sandy ranks as the most damaging weather event faced by FirstEnergy. By the time Sandy's wind and rains ceased and floodwaters receded, the super storm had crossed every state served by FirstEnergy.

In October 2012, Sandy's hurricane-force winds and rains hammered FirstEnergy's operating companies in New Jersey, Pennsylvania, and parts of Maryland. In addition, FirstEnergy service areas in western Maryland and parts of West Virginia were blanketed with up to three feet of snow and wind gusts of up to 80 mph. In Ohio, FirstEnergy's service area along the Lake Erie shoreline experienced high winds and rain.

FirstEnergy's transmission and distribution utilities responded to the catastrophic destruction caused by Sandy with the largest mobilization of crews, equipment, material, and support in FirstEnergy history. While the regional dispatch offices of FirstEnergy's utilities directed local restoration efforts, FirstEnergy's emergency operations center in Akron, Ohio, supported the overall service restoration effort.

More than 20,000 workers, comprised of FirstEnergy employees, other utility personnel and contractors, joined the massive service restoration effort. Linemen, hazard responders, damage assessors, and other service and support personnel were engaged in restoring service to customers. Companywide, crews responded to more than 65,000 reports of lines down and other hazards. During the restoration effort, approximately 20,000 damaged crossarms, 6,300 utility poles and 4,600 transformers were replaced, and 700 miles of wire hung. Overall, FirstEnergy's three customer contact centers received 1.5 million outage calls, the most ever taken in a single service restoration event.

In the face of many challenges, crews restored service to more than half of the affected FirstEnergy customers within three days and two-thirds of customers within five days. More than 95 percent of the affected FirstEnergy customers in Pennsylvania, Ohio, West Virginia, and Maryland had service restored within eight days of Hurricane Sandy coming ashore. By day 13, over 95 percent of JCP&L's customers had their service restored.

AEP/Transource

F3 Tornado in Blacksburg, VA:

An F3 tornado touched down during the early morning hours of April 28, 2011, in Glade Spring, Virginia. The National Weather Service in Blacksburg estimated that winds for this tornado approached 140 mph. It carved a path of destruction that measured one-half mile wide and four

miles in length. AEP's EHV 500 kV Broadford - Sullivan transmission line was severely damaged over a five-mile section.

The restoration effort began immediately with a preliminary damage assessment performed by AEP maintenance personnel. Detailed inspections involving engineering, climbing crews and contractors then followed the preliminary assessment. The detailed field evaluations revealed that 16 structures were destroyed, and seven lattice towers were damaged by the tornado. In addition, 64 new concrete pier foundations with stub angles would need to be installed.

The restoration of the 500 kV Broadford - Sullivan line was successful because of the collective effort and diverse skill sets of the contractors and AEP personnel which comprised the project team. Key decisions made by the project team on several critical path tasks facilitated the timely restoration of this EHV transmission line. These decisions included:

- Tower removal - using helicopters instead of cranes, trucks, and other ground support equipment.
- Foundation type - proceeding with concrete drilled piers instead of steel grillages.
- Foundation design and installation - using nomographs with on-site geotechnical engineering observation instead of developing a one-size fits all design.
- Material source – checking on large scale projects, inventory, or supplier fabrication.
- Contractor experience – utilizing a high level of skill and experience with chosen method of restoration.
- Tower repair - as opposed to tower replacement.

The 500 kV Broadford - Sullivan line was placed back in service on July 21, 2011. The outage lasted 85 days and the line was placed into service 57 days ahead of the original schedule.

Section 9: Description of the experience of the entity or its affiliate, partner, or parent company in acquiring rights of way (ROW).

To address the ROW requirements of any potential projects, each of the JV Applicants or its affiliates have substantial full-time internal staff responsible for ROW acquisition. These ROW, Siting and Real Estate groups have personnel throughout the PJM Region with numerous ROW acquisition efforts underway at all times. The ROW groups have considerable experience working within the eminent domain construct to timely effect construction of RTEP projects. The JV Applicants also benefit from participation in the International Right of Way Association and the American Association of Professional Landmen, maintaining Staff and contractor certifications. In addition, the JV Applicants collaborate with peer utilities on real estate matters through the North American Transmission Forum.